

Pedestrian Collisions: Summary of Findings

Collisions and Fatalities

- The 1994 COG household transportation survey estimated that approximately **18%** of all daily trips to/from/within the District of Columbia are made on foot. Over the 1997-1999 time period, pedestrians were involved in almost **5%** of all traffic collisions during the three-year period. The chart below summarizes the number of collisions involving pedestrians as a percentage of all traffic collisions over the three-year time period. In addition, there were 43 pedestrian collisions on National Park Service lands in the 1997-1999 time period; however, the total number of collisions on NPS lands is not known for the study period.

Year	Collisions Involving Pedestrians	Total Collisions	Percent of Total
1997	712	13,896	5.1%
1998	457	11,341	4%
1999	616	12,955	4.8%
<i>3-yr Total: TARAS</i>	<i>1785</i>	<i>38,192</i>	<i>4.7%</i>
<i>NPS (1997-1999)</i>	<i>43</i>		
<i>Total (with NPS data)</i>	<i>1828</i>		
<i>Average per year</i>	<i>609</i>	<i>12,731</i>	<i>4.7%</i>

- Over the three-year period, traffic collisions resulted in 48¹ pedestrian fatalities, broken down as follows:

Year	Pedestrian Fatalities	Fatalities in All Collisions
1997	15 + 1(NPS)	40 (incl. NPS)
1998	15 (FARS)	54 (FARS)
1999	17	46
<i>3-yr Total</i>	<i>48</i>	<i>140</i>

- In 1997, most of the fatality victims were male (10 out of 15), and most were older than 45 years of age (9/15). Four were killed in hit and run collisions. Information about the victim killed on NPS land was not available for this report. In 1998, most of the victims were female, but the split was close: 8 female, 7 male victims. Ten of the victims were over 40 years of age. Three victims were killed in hit and runs collisions. In both 1997 and 1998, one collision incident killed two pedestrians. In 1999, most victims were male (13/17) and over 45 years of age. Five victims were killed in hit and run collisions.

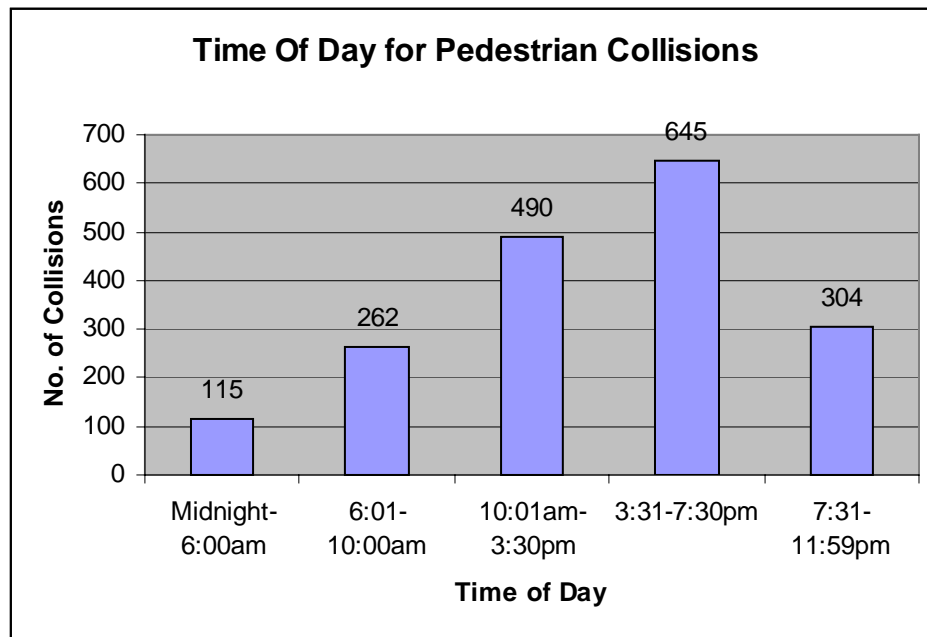
¹ 1998 figures were unavailable from DDOT at this time. National Fatality Accident Reporting System (FARS) figures were used instead.

- Hit and runs made up a significant percentage of collisions involving pedestrians in all three years.

Year	Hit-and-Run Collisions vs. All Pedestrian Collisions	Hit-and-Runs Involving Pedestrians vs. All Hit-and-Run Collisions
1997	146/712→21%	146/4884→3%
1998	92/457→20%	92/3767→2%
1999	116/616→19%	116/4210→3%
<i>3-yr Total</i>	<i>20%</i>	<i>3%</i>

Collision Frequency²

- Collisions involving pedestrians were most likely to occur on a weekday, during evening rush hour in the spring. The chart below shows the distribution of collision time over the three-year period.



Collision Location

- Collisions were most likely to happen in the Northwest quadrant of the District, specifically in Wards 1 and 2.

² Chart depicting time of day frequency for pedestrian collisions includes NPS data.

- Ward breakdowns are as follows³:

Ward	No. of Collisions	No. of Fatalities
1	216	4
2	534	14
3	94	2
4	138	1
5	187	4
6	211	4
7	136	4
8	138	5
Borders		4 (3 b/t 5&6; 1 b/t 6&8)
Insufficient location data		6

- The worst intersections for pedestrian collisions are as follows:

Benning Rd. & Minnesota Ave., NE

→ 9 collisions

Wisconsin Ave. & M St., NW

→ 8 collisions

16th St. & Irving St., NW
North Capitol St. & New York Ave.
7th St & Florida Ave., NW

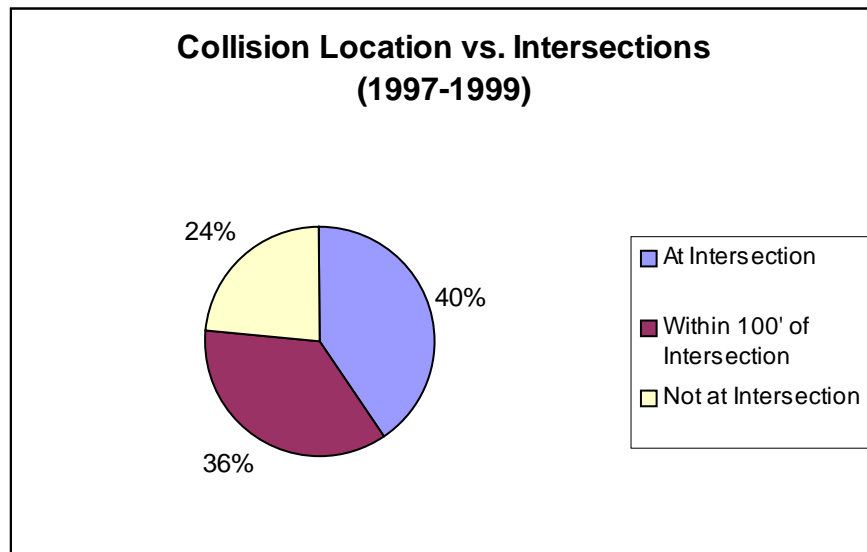
→ 7 collisions

3rd St. & Florida Ave., NW
7th St. & Pennsylvania Ave., NW
13th St. & Pennsylvania Ave., NW
15th & L Sts., NW
16th & Lamont Sts., NW
18th St. & Columbia Rd., NW
Mississippi Ave. & Wheeler Rd., SE
North Capitol St. & Florida Ave.

→ 6 collisions

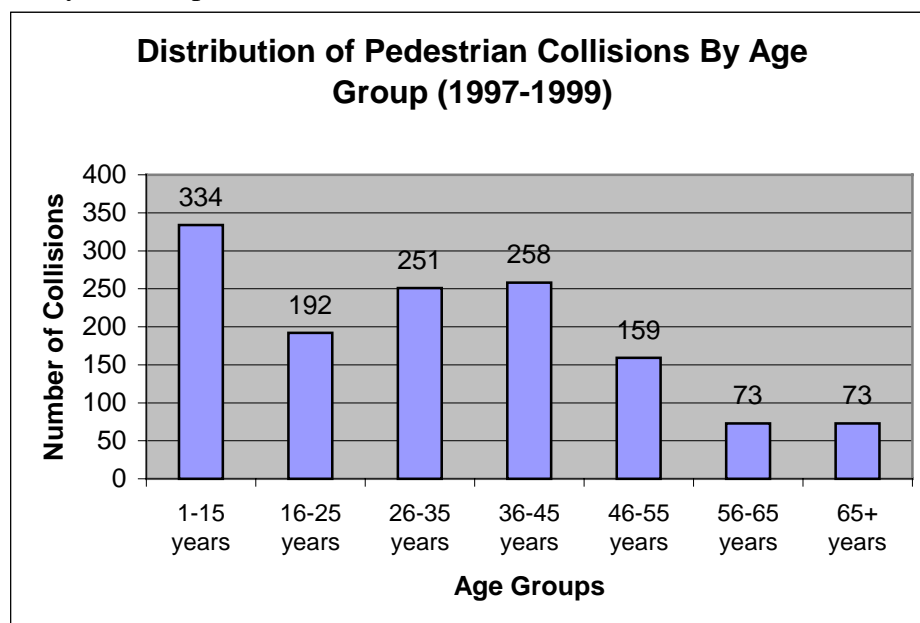
³ Ward data was not collected in the original PD-10 reports. Figures shown here were derived from shape files created in ARCVIEW/GIS, based on intersection and block address data collected from the PD-10 forms. Where intersection and block address data was not available, a map point could not be created, so not all collisions could be mapped. Since some collisions could not be mapped and Ward breakdowns are based on mapped data, Ward figures will not add up to aggregate collision figures shown in this report.

- Most collisions were characterized as occurring ‘At the Intersection.’



Pedestrian Profile⁴

- Male pedestrians were more likely to be involved in collisions than female pedestrians, although not by much. Of the records for which this information was collected, 57% of the victims were male, 43% were female. The median age of victims was **29**, and approximately 25% of all victims were children age 15 or younger. Pedestrians in this age group accounted for the most number of collisions. The chart below shows the age distribution for collision victims during the three-year time period.



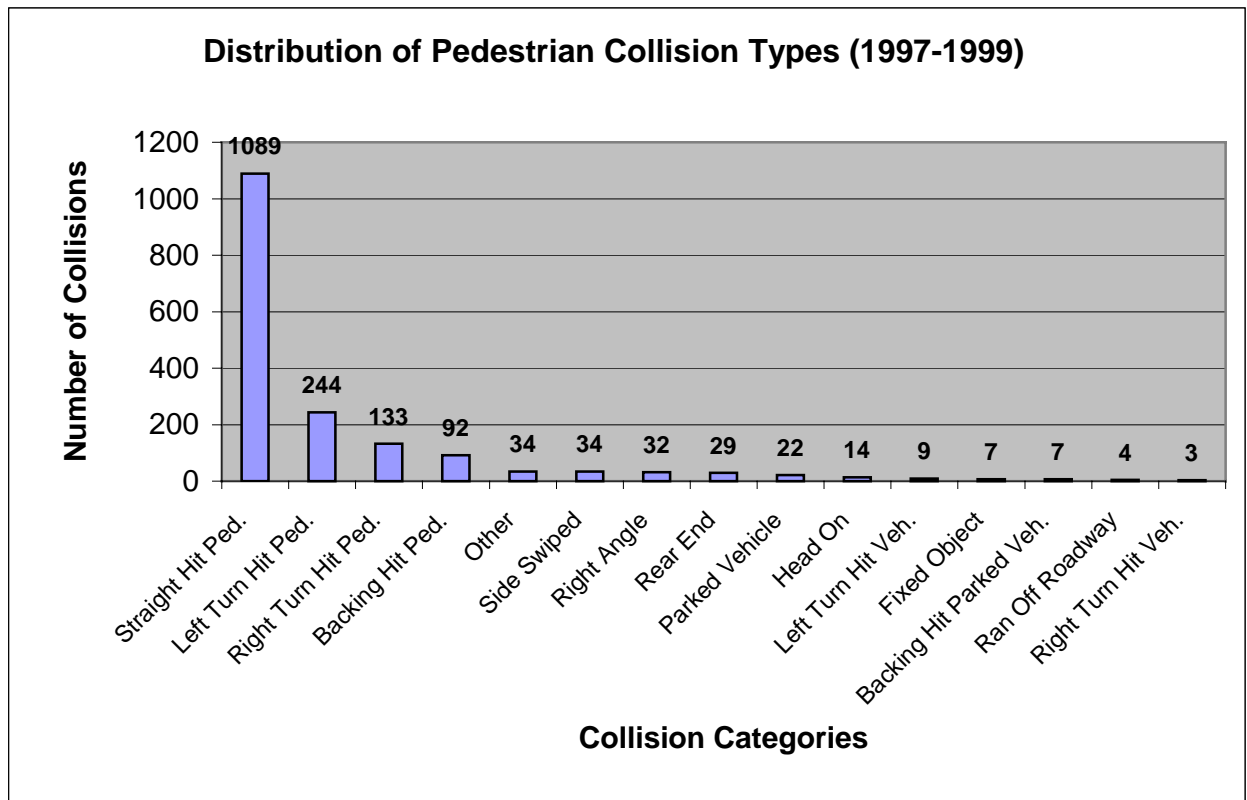
⁴ The information in this section is based only on those records where data was provided.

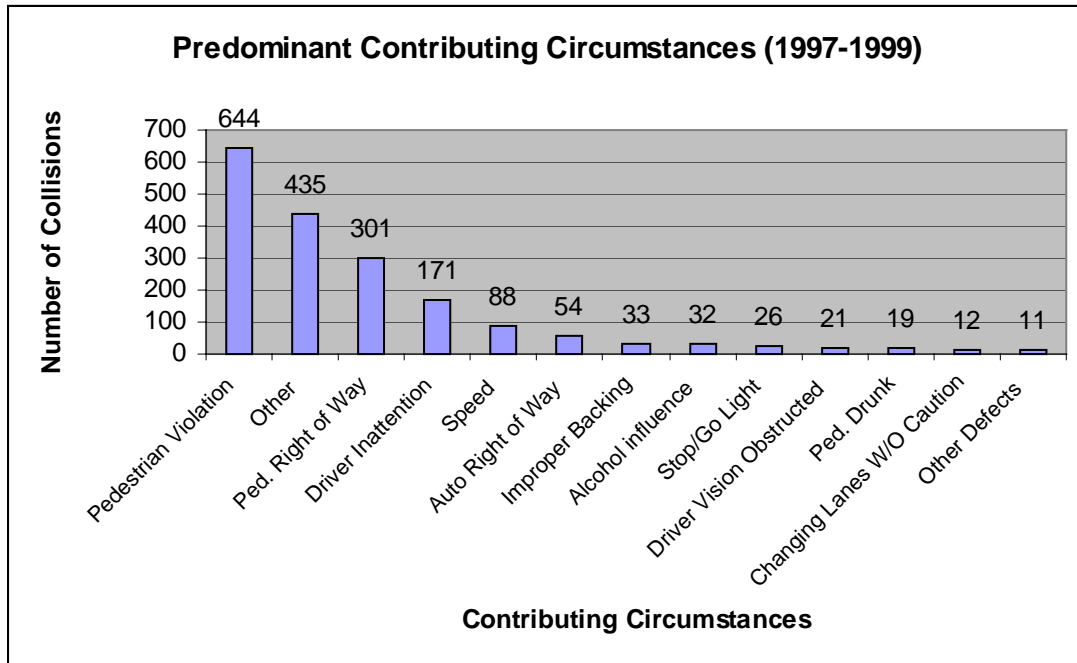
- According to police reports, relatively few of these collisions involved alcohol—either with the pedestrian or the driver.

	1997	1998	1999
Pedestrian impaired	26	13	25
Driver impaired	9	9	16
<i>Total</i>	<i>35</i>	<i>22</i>	<i>41</i>

Type of Collision

- Over the three-year period, the predominant type of collision was a “**Straight hit pedestrian**” collision and the top cause of the collision was “**Pedestrian Violation.**” The charts below show the distribution of collision type and contributing circumstances.



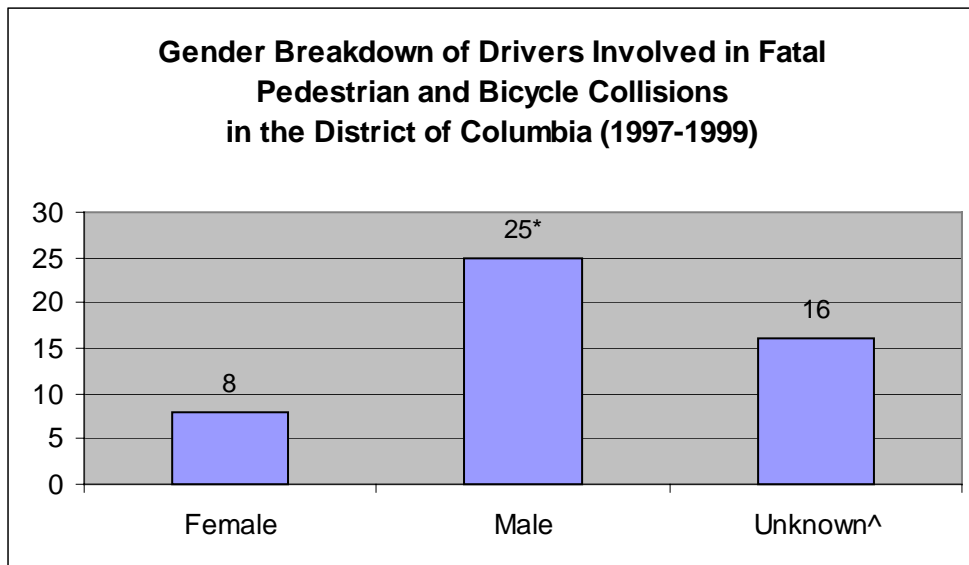
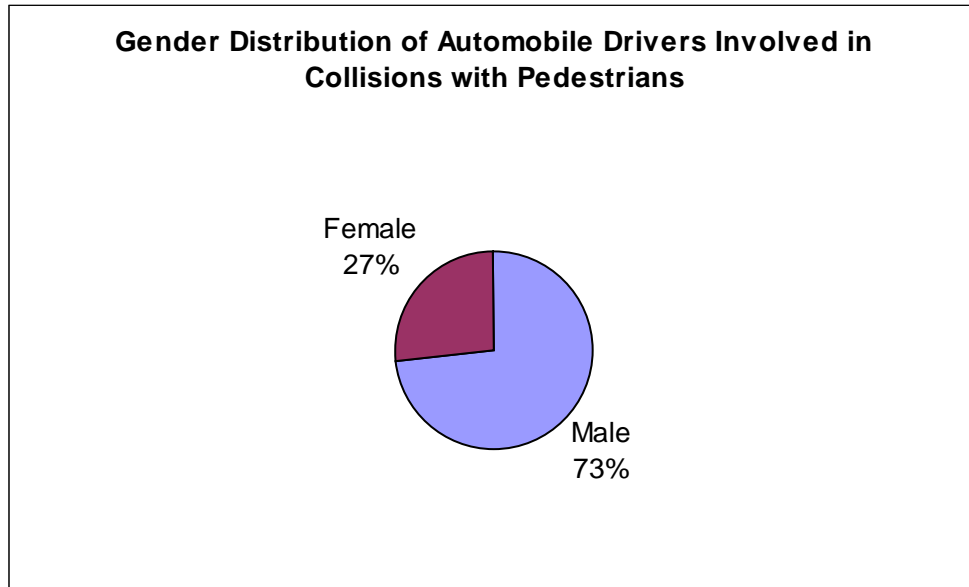


- Finally, in at least 40% of the crashes, pedestrians were hit while **not** in the designated crosswalks. The chart below summarizes pedestrian actions at the time of the collision.

	1997	1998	1999	1997-1999	% of Total
Not in crosswalk	195	117	153	465	27%
With signal, in crosswalk	122	75	108	305	17%
<Other>	126	73	109	308	17%
From between parked cars	75	48	83	206	12%
Against signal, in crosswalk	45	25	38	108	6%
In crosswalk, no signal	38	40	45	123	7%
In unmarked crosswalk	16	8	5	29	2%
Unknown	24	22	24	70	4%

Automobile Driver Profile

There were about 1,820 collisions involving pedestrians over the three-year period, however, a number of those collisions involved more than one automobile. An analysis of available information on all automobile drivers involved in these collisions with pedestrians showed that about 73% were male, with an average age of 26.7 years. The average age for the 27% of drivers who were female was 36⁵.



⁵ Age data was derived for those records where the driver's age > 15.